



We're changing the equation

## **PCEF Program Spotlight – October 2019**

### **STEM – Makerspace at Ecker Hill**

Ecker Hill teacher Brad Gannon knew that if students could experiment with fun hands-on learning, they would better understand core concepts. As one of the Career and Technical Education (CTE) teachers, his goal is to make education come to life and connect kids to skills they love and can use for the jobs of the future.

In 2015, inspired by the ‘brainy toys’ funded by PCEF for Trailside’s Makerspace, Brad wrote a PCEF grant for a Makerbot 3-D printer in his classroom. “Young students get bored with lots of text,” he wrote in his grant, “making information visible helps, but when you truly want to keep students interested, you need them to tinker, to build, and create.” It was revolutionary at the time, asking for such an expensive piece of equipment for a middle school classroom.

Since then, Brad and the other CTE teachers have been awarded numerous PCEF grants as they’ve expended Ecker Hill’s Makerspace. Hundreds of students have been involved in the program during the iTime Advisory period, CTE classes and throughout the school day.

Brad and his colleague Trip Marshall have been coaching a group of 6th and 7th-grade students in the afterschool Technology Student Association, also known as TSA. Within TSA students are using technological tools, equipment, and materials provided by the Makerspace for creative projects that have included state competitions, iTime events, and a multitude of school-related endeavors.

For many students, experiential learning makes all the difference. Steven (name changed) had little enthusiasm for school. All of his teachers liked him and knew he was bright, but his motivation was so low that he was frequently absent. His grades reflected his lack of interest. He joined TSA because he really liked working with the tools and building things, rather than sitting in a classroom.

As Brad and Trip tell it. “We’ll never forget the day we walked into the automotive bay at Davis Technical College for our TSA competition. Steven took one look around at the trucks being

worked on and stated with wide-eyes "THIS is where I am going to school". We talked with him off and on throughout the day about what it would take for him to accomplish this, and he was very positive about the idea. Steven's performance went up, and absences fell off for the rest of the year. We cannot wait to see how he does in the future!"

Thank you PCEF donors for funding STEM programs that inspire every student to reach their academic and lifelong potential! When science is hands on, creative thinking takes off!